

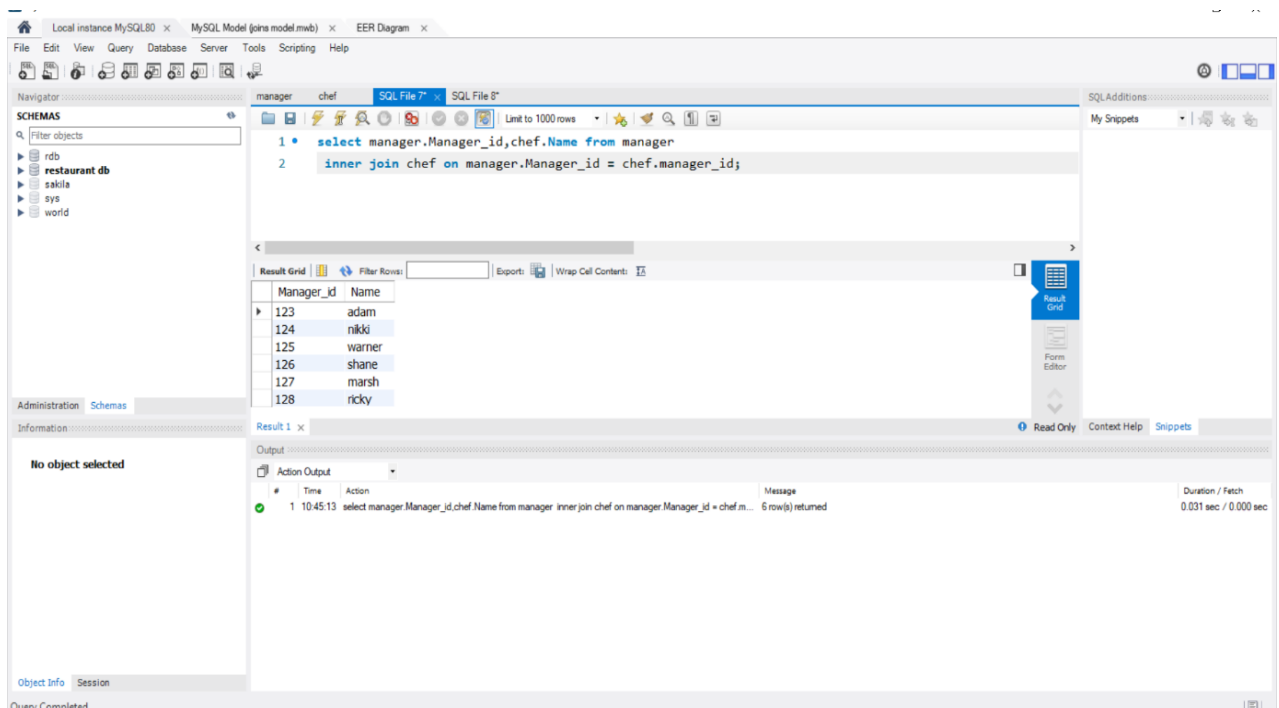
DBMS ASSIGNMENT 5 (JOINS)

1. INNER JOIN:

a. Query:

```
select manager.Manager_id, chef.Name from manager inner join  
chef on manager.Manager_id = chef.manager_id;
```

Output:



The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
1 • select manager.Manager_id, chef.Name from manager  
2 inner join chef on manager.Manager_id = chef.manager_id;
```

The Results tab displays the output of the query in a table format:

Manager_id	Name
123	adam
124	nikki
125	warner
126	shane
127	marsh
128	ricky

The bottom status bar indicates "Query Completed".

b. Query:

```
select * from customer inner join bill on bill.bill_id = (select bill_id  
from bill where bill_id = customer.bill_id);
```

Output:

The screenshot shows the MySQL Workbench interface with a query executed in the SQL File editor. The query is:

```
1 select * from customer inner join bill on bill.bill_id =
2 (select bill_id from bill where bill_id = customer.bill_id);
```

The result grid displays the following data:

Customer id	Name	Phone Number	bill_id	bill_id	amount	cashier_id
103	aftab	98276336	113	113	1000	91
100	carey	93847532	114	114	1679	94
101	alex	82763536	115	115	3650	92
102	fawad	82464627	116	116	4500	93
104	prakash	98765456	117	117	6000	90

The output pane shows the execution details: 1 row(s) returned, 0.093 sec / 0.000 sec.

c. Query:

select manager.manager_id,cashier.cashier_id,cashier.Name,
cashier.salary from cashier inner join manager on
manager.manager_id = cashier.manager_id and cashier.manager_id
> '126';

Output:

The screenshot shows the MySQL Workbench interface with a query executed in the SQL File editor. The query is:

```
1 select manager.manager_id,cashier.cashier_id,cashier.Name,cashier.salary from cashier inner join manager on
2 manager.manager_id = cashier.manager_id and cashier.manager_id > '126';
```

The result grid displays the following data:

manager_id	cashier_id	Name	salary
127	91	harsh	10000
127	93	shiva	13000
130	94	priya	16600

The output pane shows the execution details: 3 row(s) returned, 0.125 sec / 0.000 sec.

2. LEFT OUTER JOIN:

a. Query:

```
select waiter.waiter_id,waiter.salary,waiter.Name,waiter.  
manager_id from waiter left outer join chef on chef.manager_id =  
waiter.manager_id group by waiter.Name;
```

Output:

The screenshot shows a database management tool interface. On the left, a 'SCHEMAS' panel lists 'restaurant db'. The main query editor contains the following SQL code:

```
1 select waiter.waiter_id,waiter.salary,waiter.Name,waiter. manager_id from waiter left outer join chef on  
2 chef.manager_id = waiter.manager_id group by waiter.Name;
```

Below the query editor, the 'Result Grid' displays the following data:

waiter_id	salary	Name	manager_id
1	7000	maxv	126
2	7500	windy	127
3	8700	george	128
4	6700	hemanth	126
5	6500	vineeth	127

On the bottom left, the 'Table: cashier' structure is shown:

- cashier_id: int PK
- Name: varchar(45)
- Phone: int
- Number: int
- Salary: int
- manager_id: int PK

The bottom right section shows the 'Output' tab with a message: 'select waiter.waiter_id,waiter.salary,waiter.Name,waiter. manager_id from waiter left outer join chef on chef.ma... 5 row(s) returned'. The duration is 0.125 sec / 0.000 sec.

b. Query:

```
select * from customer left outer join bill on bill.bill_id =  
customer.bill_id order by customer.customer_id;
```

Output:

The screenshot shows a SQL query execution interface. The query is a left outer join between the 'customer' and 'bill' tables on 'customer.bill_id'. The result grid displays 6 rows of data. The 'cashier' table schema is also visible on the left.

customer_id	Name	Phone Number	bill_id	bill_id	amount	cashier_id
100	carey	93847532	114	114	1679	94
101	alex	82763536	115	115	3650	92
102	fawad	82464627	116	116	4500	93
103	aftab	98276336	113	113	1000	91
104	prakash	98765456	117	117	6000	90

Table: cashier

Columns:

- cashier_id int PK
- Name varchar(45)
- Phone Number int
- Salary int
- manager_id int PK

c. Query:

select cashier.cashier_id,cashier.Name,bill.bill_id from cashier left outer join bill on cashier.cashier_id = bill.cashier_id or cashier.cashier_id > 90 order by cashier.cashier_id;

Output:

The screenshot shows a SQL query execution interface. The query is a left outer join between the 'cashier' and 'bill' tables on 'cashier.cashier_id = bill.cashier_id or cashier.cashier_id > 90'. The result grid displays 5 rows of data. The 'cashier' table schema is also visible on the left.

cashier_id	Name	bill_id
90	sunny	112
90	sunny	117
91	harsh	112
91	harsh	113
91	harsh	114

Table: cashier

Columns:

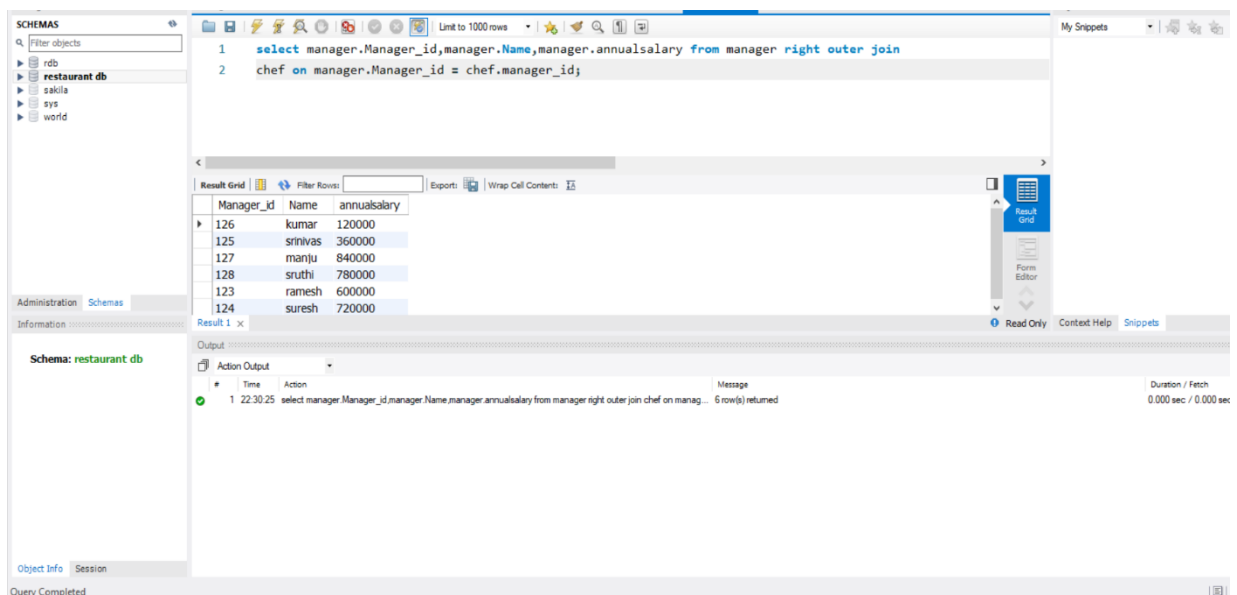
- cashier_id int PK
- Name varchar(45)
- Phone Number int
- Salary int
- manager_id int PK

3. RIGHT OUTER JOIN:

a. Query:

```
select manager.Manager_id,manager.Name,manager.annualsalary  
from manager right outer join chef on manager.Manager_id =  
chef.manager_id;
```

Output:



The screenshot shows a database management tool interface. On the left, a 'SCHEMAS' pane lists databases: rdb, restaurant db, sakila, sys, and world. The main query editor contains the following SQL query:

```
1 select manager.Manager_id,manager.Name,manager.annualsalary from manager right outer join  
2 chef on manager.Manager_id = chef.manager_id;
```

Below the query editor, the 'Result Grid' displays the query results. The results are as follows:

Manager_id	Name	annualsalary
126	kumar	120000
125	srinivas	360000
127	manju	840000
128	sruthi	780000
123	ramesh	600000
124	suresh	720000

At the bottom, the 'Output' pane shows the execution details: 'Action Output' for 'select manager.Manager_id,manager.Name,manager.annualsalary from manager right outer join chef on manag...' with a message '6 row(s) returned' and a duration of '0.000 sec / 0.000 sec'.

b. Query:

```
select * from customer right outer join bill on customer.bill_id =  
bill.bill_id and bill.bill_id >= '113';
```

Output:

The screenshot shows a database management tool interface. On the left, the 'SCHEMAS' panel lists 'restaurant db' as the selected schema. The main query editor contains the following SQL query:

```
1 * select * from customer right outer join bill on
2 customer.bill_id = bill.bill_id and bill.bill_id >= '113';
```

The 'Result Grid' displays the following data:

customer_id	Name	Phone Number	bill_id	bill_id	amount	cashier_id
103	aftab	98276336	113	113	1000	91
100	carey	93847532	114	114	1679	94
101	alex	82763536	115	115	3650	92
102	fawad	82464627	116	116	4500	93

The 'Output' panel shows the execution details:

```
1 22:41:16 select * from customer right outer join bill on customer.bill_id = bill.bill_id and bill.bill_id >= '113' LIMIT 0, 1000
Message: 6 row(s) returned
Duration / Fetch: 0.047 sec / 0.000 sec
```

c. Query:

select waiter.waiter_id,waiter.Name,waiter.salary,
manager.manager_id from waiter right outer join manager on
waiter.manager_id = manager.manager_id and waiter.manager_id
and manager.manager_id <= '130';

Output:

The screenshot shows the same database management tool interface. The 'SCHEMAS' panel still shows 'restaurant db'. The main query editor contains the following SQL query:

```
1 * select waiter.waiter_id,waiter.Name,waiter.salary,manager.manager_id from waiter right outer join
2 manager on waiter.manager_id = manager.manager_id and waiter.manager_id and
3 manager.manager_id <= '130';
4
```

The 'Result Grid' displays the following data:

waiter_id	Name	salary	manager_id
109			109
123			123
124			124
125			125
1	maxy	7000	126
4	hemanth	6700	126

The 'Output' panel shows the execution details:

```
1 23:07:41 select waiter.waiter_id,waiter Name,waiter salary,manager manager_id from waiter right outer join manager on ...
Message: 10 row(s) returned
Duration / Fetch: 0.000 sec / 0.000 sec
```

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